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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,904	02/27/2004	Yuqun Chen	MSI-1969US	9299
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LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			EXAMINER HAUPT, KRISTY A	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/789,904

Applicant(s)

CHEN ET AL.

Examiner

Kristy A. Haupt

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :2/04, 1/06, 7/06, 10/06 and 11/07.

DETAILED ACTION

This office action is in response to Application 10/789,904 filed 27 February 2004. Claims 1-51 are pending with claims 1, 19 and 41 in independent form.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-51 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaish et al. US 5,974,150.

Kaish teaches:

With respect to claim 1:

- Encoding a plurality of features of a label with a private key to provide a medium certificate (Column 22, Lines 27-46)
- Decoding the medium certificate with a public key (Column 23, Lines 4-19)
- Verifying the decoded medium certificate against the plurality of label features to determine whether the label is genuine (Column 23, Lines 15-18)

With respect to claim 2 and incorporating all limitations of claim 1:

- Wherein the plurality of label features comprise coordinates of a plurality of optical fiber strands present on the label (Abstract and Column 22, Lines 38-64)

With respect to claim 3 and incorporating all limitations of claim 1:

- Wherein the medium certificate is provided with the label (Abstract, Column 22, Lines 27-28 and Figure 1)

With respect to claim 4 and incorporating all limitations of claim 1:

- Wherein the medium certificate is provided with the label and the medium certificate is represented as one or more items selected from a group comprising a bar code and an RFID (Figure 1 and Column 22, Lines 27-46)

With respect to claim 5 and incorporating all limitations of claim 1:

- Wherein the medium certificate is provided remotely (Column 26, Lines 15-27)

With respect to claim 6 and incorporating all limitations of claim 1:

- Wherein the medium certificate is provided remotely through data stored in a database (Column 26, Lines 15-27)

With respect to claim 7 and incorporating all limitations of claim 1:

- Obtaining at least two shots of the label (Column 14, Lines 9-20, Column 23, Lines 27-42 and Column 28, Lines 7-30)
- Extracting data from the label shots (Column 14, Lines 9-20, Column 23, Lines 27-42 and Column 28, Lines 7-30)
- Determining a motion transformation function of the extracted data (Column 14, Lines 9-20, Column 23, Lines 27-42 and Column 28, Lines 7-30)
- Forming a multi-dimensional map of the plurality of label features (Column 14, Lines 9-20, Column 23, Lines 27-42 and Column 28, Lines 7-30)

With respect to claim 8 and incorporating all limitations of claim 7:

- Wherein the multi-dimensional map of the plurality of label features has a dimension selected from a group comprising about two, three and four (Column 14, Lines 9-20)

With respect to claim 9 and incorporating all limitations of claim 7:

- Wherein the extracted data comprises data selected from a group comprising guide pattern coordinates and lit fiber end coordinates (Column 14, Lines 9-20)

With respect to claim 10 and incorporating all limitations of claim 7:

- Wherein the multi-dimensional map of the plurality of label features is compressed (Column 28, Lines 7-30)

With respect to claim 11 and incorporating all limitations of claim 1:

- Wherein data regarding the plurality of label features is compressed prior to the encoding (Column 28, Lines 7-14)

With respect to claim 12 and incorporating all limitations of claim 1:

- Wherein the plurality of label features comprise one or more features selected from a group comprising optical fiber length, optical fiber curvature, optical fiber relative light intensity, optical fiber florescence, optical fiber color and optical fiber thickness (Column 22, Lines 47-58)

With respect to claim 13 and incorporating all limitations of claim 1:

- Binding an application certificate to the medium certificate (Column 27, Lines 20-40)

With respect to claim 14 and incorporating all limitations of claim 1:

- Binding an application certificate to the medium certificate, wherein the application certificate comprises application data (Column 27, Lines 20-40)

With respect to claim 15 and incorporating all limitations of claim 1:

- Binding an application certificate to the medium certificate, wherein the application certificate is provided by using a private key (Column 27, Lines 20-40)

With respect to claim 16 and incorporating all limitations of claim 1:

- Binding an application certificate to the medium certificate and verifying that the application certificate corresponds to the medium certificate to determine if the label is genuine (Column 27, Lines 20-40)

With respect to claim 17 and incorporating all limitations of claim 16:

- Wherein the verification of the application certificate is performed by using a public key (Column 27, Lines 20-40)

With respect to claim 18 and incorporating all limitations of claim 1:

- One or more computer readable media storing computer executable instructions that, when executed, perform the method as recited in claim 1 (Figures 4A and 4B)

With respect to claim 19:

- Encoding a plurality of features of a label to provide a medium certificate (Column 22, Lines 27-46)

- Providing an identifying indicia corresponding to the medium certificate (Figure 1 and Column 22, Lines 27-46)
- Verifying the identifying indicia against the plurality of features of the label to determine whether the label is genuine (Column 23, Lines 15-18)

With respect to claim 20 and incorporating all limitations of claim 19:

- Wherein the plurality of label features comprise coordinates of a plurality of optical fibers strands present on the label (Abstract and Column 22, Lines 38-64)

With respect to claim 21 and incorporating all limitations of claim 19:

- Wherein the medium certificate is provided by using a private key (Column 22, Lines 27-46)

With respect to claim 22 and incorporating all limitations of claim 19:

- Wherein the verifying is performed by using a public key (Column 23, Lines 4-19)

With respect to claim 23 and incorporating all limitations of claim 19:

- Wherein the identifying indicia is provided with the label (Figure 1 and Column 22, Lines 27-46)

With respect to claim 24 and incorporating all limitations of claim 19:

- Wherein the plurality of label features comprise one or more features selected from a group comprising optical fiber length, optical fiber curvature, optical fiber relative light intensity, optical fiber florescence, optical fiber color and optical fiber thickness (Column 22, Lines 47-58)

With respect to claim 25 and incorporating all limitations of claim 19:

- Wherein the identifying indicia is provided with the label and the identifying indicia is one or more items selected from a group comprising a bar code and an RFID (Figure 1 and Column 22, Lines 27-46)

With respect to claim 26 and incorporating all limitations of claim 19:

- Wherein the identifying indicia is provided remotely (Column 26, Lines 15-27)

With respect to claim 27 and incorporating all limitations of claim 19:

- Wherein the identifying indicia is provided remotely through data stored in a database (Column 26, Lines 15-27)

With respect to claim 28 and incorporating all limitations of claim 19:

- Obtaining at least two shots of the label (Column 14, Lines 9-20, Column 23, Lines 27-42 and Column 28, Lines 7-30)

- Extracting data from the label shots (Column 14, Lines 9-20, Column 23, Lines 27-42 and Column 28, Lines 7-30)
- Determining a motion transformation function of the extracted data (Column 14, Lines 9-20, Column 23, Lines 27-42 and Column 28, Lines 7-30)
- Forming a multi-dimensional map of the plurality of label features (Column 14, Lines 9-20, Column 23, Lines 27-42 and Column 28, Lines 7-30)

With respect to claim 29 and incorporating all limitations of claim 28:

- Wherein the multi-dimensional map of the plurality of label features has a dimension selected from a group comprising about two, three and four (Column 14, Lines 9-20)

With respect to claim 30 and incorporating all limitations of claim 28:

- Wherein the extracted data comprises data selected from a group comprising guide pattern coordinates and lit fiber end coordinates (Column 14, Lines 9-20)

With respect to claim 31 and incorporating all limitations of claim 28:

- Wherein the multi-dimensional map of the plurality of label features is compressed (Column 28, Lines 7-30)

With respect to claim 32 and incorporating all limitations of claim 19:

- Wherein data regarding the plurality of label features is compressed prior to the encoding (Column 28, Lines 7-14)

With respect to claim 33 and incorporating all limitations of claim 19:

- Binding an application certificate to the medium certificate (Column 27, Lines 20-40)

With respect to claim 34 and incorporating all limitations of claim 19:

- Binding an application certificate to the medium certificate, wherein the application certificate comprises application data (Column 27, Lines 20-40)

With respect to claim 35 and incorporating all limitations of claim 19:

- Binding an application certificate to the medium certificate, wherein the application certificate is provided by using a private key (Column 27, Lines 20-40)

With respect to claim 36 and incorporating all limitations of claim 19:

- Binding an application certificate to the medium certificate, wherein the application certificate is provided by a hash value of the medium certificate (Column 27, Lines 20-40 and Column 16, Lines 45-64)

With respect to claim 37 and incorporating all limitations of claim 19:

- Binding an application certificate to the medium certificate, wherein the application certificate is provided by appending a hash value of the medium certificate to application data to form extended application data (Column 27, Lines 20-40 and Column 16, Lines 45-64)

With respect to claim 38 and incorporating all limitations of claim 19:

- Binding an application certificate to the medium certificate and verifying that the application certificate corresponds to the medium certificate to determine if the label is genuine (Column 27, Lines 20-40)

With respect to claim 39 and incorporating all limitations of claim 38:

- Wherein the verification of the application certificate is performed by using a public key (Column 27, Lines 20-40)

With respect to claim 40 and incorporating all limitations of claim 19:

- One or more computer readable media storing computer executable instructions that, when executed, perform the method as recited in claim 19 (Figures 4A and 4B)

With respect to claim 41:

- A processor (Abstract)
- A system memory coupled to the processor (Figure 2, #23)
- A medium scanner operatively coupled to the processor to scan a plurality of features of a label (Figure 3, #44)
- A label encoder to encode the plurality of label features as a medium certificate (Figure 4A)
- A label printer to print the medium certificate on the label (Figure 2, #34)

With respect to claim 42 and incorporating all limitations of claim 41:

- Wherein data regarding the scanned plurality of label features is compressed prior to encoding (Column 28, Lines 7-14)

With respect to claim 43 and incorporating all limitations of claim 41:

- Wherein the label printer further prints an application certificate on the label (Column 16, Lines 31-35 and Column 27, Lines 20-40)

With respect to claim 44 and incorporating all limitations of claim 41:

- Wherein the plurality of label features comprise coordinates of a plurality of optical fiber strands present on the label (Abstract and Column 22, Lines 38-64)

With respect to claim 45 and incorporating all limitations of claim 41:

- Wherein the plurality of label features comprise one or more features selected from a group comprising optical fiber length, optical fiber curvature, optical fiber relative light intensity, optical fiber florescence, optical fiber color and optical fiber thickness (Column 22, Lines 47-58)

With respect to claim 46 and incorporating all limitations of claim 41:

- A label scanner to verify the medium certificate against the plurality of label features (Column 25, Lines 50-56 and Figure 3, #44)

With respect to claim 47 and incorporating all limitations of claim 41:

- An application label encoder to encode application data bound to the medium certificate as an application certificate (Column 27, Lines 20-40)

With respect to claim 48 and incorporating all limitations of claim 41:

- A label scanner to scan the medium certificate off of the label and a verification medium scanner to scan the plurality of label features wherein if the medium certificate is decoded using a public key and the decoded medium certificate matches the scanned plurality of the label features by the verification medium scanner, the label is declared as genuine (Column 24, Line 63 – Column 25, Line 6)

With respect to claim 49 and incorporating all limitations of claim 48:

- Wherein the matching is determined based on a threshold value (Column 12, Lines 48-50)

With respect to claim 50 and incorporating all limitations of claim 41:

- A label scanner to scan the medium certificate off of the label and a verification medium scanner to scan the plurality of label features wherein if the medium certificate is decoded using a public key and the decoded medium certificate does not match the scanned plurality of the label features by the verification medium scanner, the label is declared as counterfeit (Column 24, Line 63 – Column 25, Line 6)

With respect to claim 51 and incorporating all limitations of claim 50:

- Wherein the matching is determined based on a threshold value (Column 12, Lines 48-50)

Examiner's Note

The Examiner has cited particular column and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the Applicant in preparing responses, to fully consider the

references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the Prior Art or disclosed by the Examiner.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristy A. Haupt whose telephone number is (571) 272-8545. The examiner can normally be reached on M-F 7:00-3:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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LISA CAPUTO
PRIMARY PATENT EXAMINER